

Notice of Allowability	Application No.	Applicant(s)	
	10/605,482	WU, GIN-DER	
	Examiner	Art Unit	
	Abdelali Serrou	2626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to communication filed on 08/22/07.
2. ☒ The allowed claim(s) is/are 1,4-14 and 17-20.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☒ Certified copies of the priority documents have been received in Application No. 092119876.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application |
| 2. <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

DETAILED ACTION

Response to Amendment

1. In response to the office action mailed on 06/20/2007, applicant filed an amendment on 08/22/2007, amending Fig. 2, and claims 1, and 14, and canceling claims 2-3, and 15-16. The pending claims are 1, 4-14, and 17-20.

Response to Arguments

2. Applicant's arguments, see communication, filed on 08/22/2007, with respect to claims 1, 4-14, and 17-20 have been fully considered and are persuasive. The rejection of claims 1, 4-14, and 17-20 has been withdrawn.

Based on applicant's arguments, and Terminal Disclaimer, filed on 08/22/2007, the current application is in condition for allowance.

Allowable Subject Matter

3. Claims 1, 4-14, and 17-20 are allowed.

The following is an examiner's statement of reasons for allowance:

Independent claims 1 and 14 teach a multiple step-sized levels adaptive method for time scaling to synthesize an $S_3[n]$ signal from an $S_1[n]$ signal and an $S_2[n]$ signal, wherein $S_1[n]$ signal has N elements while the $S_2[n]$ signal has $S_2[n]$ elements, and the $S_3[n]$ signal

=the $S_1[n]$ signal, where $0 \leq n < \text{the maximum index}$;

$$= (N_1 - n) / (N_1 - \text{the maximum index}) * S_1[n] + (n - \text{the maximum index}) / (N_1 - \text{the maximum index}) * S_4[n - \text{the maximum index}]$$
, where the maximum index $\leq n < N_1$;

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= $S_4 [n - \text{the maximum index}]$, where $N_1 \leq n \leq N_2 - \text{the maximum index}$;

= the $S_1[n]$ signal, where $0 \leq n < \text{the maximum index} + \text{a predetermined number}$;

= $(N_1 - n) / (N_1 - (\text{the predetermined number} + \text{the maximum index})) * S_1[n] + (n - (\text{the predetermined number} + \text{the maximum index})) / (N_1 - (\text{the predetermined number} + \text{the maximum index})) * S_4[n - (\text{the predetermined number} + \text{the maximum index})]$, where $(\text{the predetermined number} + \text{the maximum index}) \leq n < N_1$;

= $S_4[n - (\text{the predetermined number} + \text{the maximum index})]$, where $N_1 \leq n \leq (N_2 + \text{the predetermined number} + \text{the maximum index})$.

The closest art is by:

Miyasaka (U.S 5,845,247), who teaches an apparatus that reproduces a plurality of band signals which have been subjected to a band division and includes a time-scale modifier which receives the plurality of band signals, time-axis compresses the respective band signals, and a synthesis filter bank for synthesizing the plurality of time-axis compressed band signals.

Koezuka (U.S 6,801,898) who teaches performing time-scale modification on digital signals.

Taniguchi et al. (U.S 6,484,137) who teach an audio reproducing a system which realizes time-scale modified audio with high/low speed and of high quality, with a simple construction based on time-scale compression/expansion at a prescribed speed rate which is completed by processing data in frames.

The prior art of record do not teach a non-linear method for time-scaling to synthesize a signal as recited in claims 3 and 16.

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Dependent claims 4-13, and 17-20 are allowed for the same reason, as being dependent on allowed claims 1 and 14.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Abdelali Serrou whose telephone number is 571-272-7638. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David R. Hudspeth can be reached on 571-272-7843. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A. Serrou

10/31/07


DAVID HUDSPETH
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